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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/745,978	12/22/2000	Mohanasundaram Chinnappan	020431.0753	8477
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i2 TECHNOLOGIES US, INC. ONE i2 PLACE, 11701 LUNA ROAD DALLAS, TX 75234			ZURITA, JAMES H	
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>
	09/745,978	CHINNAPPAN ET AL.
	<b>Examiner</b>	<b>Art Unit</b>
	James H. Zurita	3625

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### **Status**

- 1) Responsive to communication(s) filed on 6 February 2007.
- 2a) This action is FINAL.                            2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### **Disposition of Claims**

- 4) Claim(s) 1-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-29 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### **Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on \_\_\_\_\_ is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### **Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
  - a) All    b) Some \* c) None of:
    1. Certified copies of the priority documents have been received.
    2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### **Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## DETAILED ACTION

### ***Response to Amendment***

Applicant's submission of 6 February 2007 has been entered.

Applicant amended claims 1, 11 and 20.

Claims 1-28 are pending and will be examined.

### ***Claim Rejections - 35 USC § 103***

The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claims 1, 3-11, 13-20, 22-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khan (US 6,460,038).

**As per claim 1**, Khan discloses an electronic commerce system for facilitating an electronic commerce transaction (see, at least Fig. 10, item 1008, **BUY NOW**, Col. 13, lines 23-62), the electronic commerce system comprising:

**a [global, see below] directory** for providing a plurality of buyers (see, for example, references to users (*pl.*) as in Fig. 5, items 512, 514; users (*pl.*) that buy, such as in Fig. 10, are **buyers**);<sup>1</sup>

access (via links) to a distributed plurality of seller databases (see, for Example, at least Fig. 10, plurality of sellers, such as LLBEAN, GAP, DELTA AIRLINES), each seller databases associated with a corresponding seller and distinct from other seller

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<sup>1</sup> The Examiner notes that while Fig. 10 is entitled Lorraine's Clickmarks, Khan does not limit his e-commerce system to a single user named Lorraine, but permits access to multiple buyers, as in Col. 9, line 65-Col. 10, line 24)

databases in the distributed plurality of seller databases (LLBEAN is a select that is distinct from other sellers such as GAP, DELTA AIRLINES, for example),

the directory comprising:

**a directory structure** comprising a plurality of product classes organized using a hierarchy (see, for example, at least Fig. 10, which discloses product classes such as travel, shopping, finances, etc., organized in a hierarchy)

**one or more pointers** associated with each product class in the plurality of product classes, each pointer identifying the seller databases in the distributed plurality of seller databases in which product data enabling a product transaction is stored for products associated with the product class, (see, for example, a pointer that is associated with a product SPECIAL FARE, item 1008, Fig. 10) the seller databases identified by the pointer being associated with its corresponding seller (i.e., TRAVELOCITY) and being distinct from the other seller databases in the distributed plurality of seller databases (TRAVELOCITY database is distinct from each of the databases of AVIS, DELTA AIRLINES, LLBEAN, LANDSEND);

**[search, see below] interface(s)** (e.g., user interface, as in Col. 2, line 65-Col. 3, line 37, for example)

operable to communicate a search query for product data to the one or more seller databases (see, for example, references to query[-ing], as in Fig. 4, item 402, Fig. 5, item 502, Fig. 6, item 602),

identified by the one or more pointers associated with the selected product class (See, for example, Fig. 10, item 1010, which shows results of a search query to

GAP, which retrieves **cargo pants**; see also Fig. 10, item 1008, which shows results of a search query to TRAVELOCITY, and retrieves information concerning a SPECIAL FARE product),

**a selection** of a product class received from one of the plurality of buyers (e.g., travel class includes different sellers associated with the travel class); and

in response to the selection of the product class received from one of the plurality of buyers (see, for example, at least references to buyer queries, as in Fig. 4, item 402, Fig. 5, item 502, Fig. 6, item 602)

communicating a search query for product data to one or more seller databases identified by one or more pointers associated with the selected product class (See, for example, results of queries, as in Fig. 10, cargo pants, special fare).

In response to communicating a search query for product data to one or more seller databases identified by one or more pointers (bookmarks) associated with the selected product class, receive address information (e.g., seller name) associated with a seller database associated with a seller of the selected product, the seller database including product data for the selected product, the address information enabling one of the plurality of buyers to communicate with the seller associated with the seller database to conduct a commerce transaction relating to the selected product (e.g., BUY).

Khan **does not** use the term search interface. An interface is software that enables a program to work with the user (MICROSOFT PRESS Computer Dictionary).

Khan discloses querying a system, as in Figs. 4-6, for example. Such searches require the use of an interface, i.e., a **search interface**.

Khan **does not** specifically state "...each seller database associated with a corresponding seller and distinct from other seller databases in the distributed plurality of seller databases..."

As previously noted, without traverse, a database is any aggregation of data; a database is a file composed of records, each containing fields together with a set of operations for searching, sorting, recombining and other functions.<sup>2</sup> For purposes of this examination, the term database will be given its broadest reasonable interpretation as an aggregation of data that may include logical and physical aspects of databases, including tables, files, views, etc.

Kahn discloses that information is retrieved from companies such as DELTA AIRLINES, AVIS, etc., as in Fig. 10. The data from the sellers contain data retrieved from a seller's aggregation of data; they are the equivalent of applicant's seller databases.

As previously noted, different sellers sell different products and services and have associated databases that are distinct from other seller databases where they store information concerning the products and services they offer for sale. For example, TRAVELOCITY often specializes in travel, DELTA AIRLINES specializes in airline seats, AVIS CAR RENTAL rents cars, GAP often sells clothing, including cargo pants.

Therefore, it would have been well within the level of one of ordinary skill in the art at the time the invention was made to combine Khan with knowledge of one of

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<sup>2</sup> Definition of Database, MICROSOFT PRESS Computer Dictionary.

ordinary skill to disclose that each seller database is associated with its corresponding seller and distinct from the other seller databases in the plurality of seller databases.

One of ordinary skill in the art at the time the invention was made would have been motivated to combine Khan with knowledge of one of ordinary skill to disclose that each seller database is associated with its corresponding seller and distinct from the other seller databases in the plurality of seller databases for the obvious reason that different sellers may specialize in particular industries and particular products.

**Kahn** does not use the term **global content directory**. However, the labels given to various actors and modules are not functionally related to the substrate of the article of manufacture. The labels themselves carry little or no patentable weight. Thus, this descriptive material will not distinguish the claimed invention from the prior art in terms of patentability, see *In re Gulack*, 703 F.2d 1381, 1385, 217 USPQ 401, 404 (Fed. Cir. 1983); *In re Lowry*, 32 F.3d 1579, 32 USPQ2d 1031 (Fed. Cir. 1994).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to apply a label to various actors and modules in a system such as **Kahn** because such data does not functionally relate to the substrate of the article of manufacture and merely labeling the data differently from that in the prior art would have been obvious. See *Gulack* cited above.

The Examiner notes applicant's disclaimer, paragraph 19, which in part clarifies the use of this label:

[0019]... Since the Internet is accessible to the vast majority of buyers and sellers in the world, the present invention potentially includes all of these buyers and sellers as buyers 20 and sellers 30 of system 10. However, the use of the term "global" should not be interpreted as a geographic limitation necessarily requiring that GCD 42 provide directory

services to buyers 20 and sellers 30 around the world or that the content of GCD 42 be from all over the world.

**As per claim 3**, Khan discloses the electronic commerce system of Claim 1, wherein the directory structure is distributed between a plurality of computers. See, for example, at least references to public bookmarks and group bookmarks, as in Fig. 10.

**As per claim 4**, Khan discloses that the directory is coupled to the seller databases using the Internet. See, for example, at least Col. 1, line 25-Col. 2, line 26.

**As per claim 5 (as interpreted)** disclose that additional directory structures are organized using a hierarchy. See, for example, references to Group Bookmarks, Public Bookmarks, Fig. 10.

It would have been well within the skill of one of ordinary skill in the art at the time

**As per claim 6**, Khan **does not** specifically state that a search query comprises a structured query language (SQL) query. Khan discloses that buyers may use GUIs (graphical user interfaces) to access relational databases such as Oracle, Informix and Sybase. Official notice is taken that structured query language (SQL) is a database sublanguage used in querying, updating and managing relational databases.

It would have been well with the skill of one of ordinary skill in the art at the time the invention was made to include in Khan the use of SQL. One of ordinary skill in the art at the time the invention was made would have been motivated to include in Khan the use of SQL for querying relational databases for the obvious reason that SQL is the *de facto* standard for database products.

**As per claim 7**, Khan discloses electronic commerce system of Claim 1, wherein the search query includes one or more attributes of the class selected by the one of the

plurality of buyers. See, for example, results of a query, as in Fig. 10; results that are retrieved based on a user's search query.

**As per claim 8**, Kahn discloses electronic commerce system of Claim 1, wherein the search query includes values for one or more desired product features specified by the one of the plurality of buyers. See, for example, at least Fig. 9 and related text, which disclose that a user may be queried as to what sales and marketing information he'd like to receive. See also references to keyword entries, as in Col. 12, lines 24-40.

**As per claim 9**, Kahn discloses electronic commerce system of Claim 1, wherein the search interface is further operable to receive search results from the one or more seller databases (see, for example, Fig. 10, results as in 1008 and 1010) each associated with its corresponding seller and distinct from the other seller databases in the plurality of seller databases in response to the search query, the search results including product data associated with one or more products satisfying the search query, the directory operable to communicate the search results to the one or more buyers. See, for example, product data such as "special fare to NYC \$150" from TRAVELOCITY.

**As per claim 10**, Kahn discloses 10 the electronic commerce system of Claim 9, wherein the electronic commerce system is operable to:

receive a selection from the one or more buyers of a product for which product data is included in the search results (see, for example, Fig. 10, item 1008); and communicate address information associated with a seller database associated with a seller of the selected product, the seller database including product data for the selected product, the address information enabling the one or more buyers to communicate with the

seller associated with the seller database to conduct a commerce transaction relating to the selected product. See, for example, references to hyperlinks to websites on servers, as in programmable bookmarks, Col. 10, line 27-Col. 11, line 28.

Claim 11 is rejected on the same grounds as claim 1.

Claim 13 is rejected on the same grounds as claim 3.

Claim 14 is rejected on the same grounds as claim 4.

Claim 15 is rejected on the same grounds as claim 5.

Claim 16 is rejected on the same grounds as claim 6.

Claim 17 is rejected on the same grounds as claim 7.

Claim 18 is rejected on the same grounds as claim 9.

Claim 19 is rejected on the same grounds as claim 10.

Claim 20 is rejected on the same grounds as claim 1.

Claim 22 is rejected on the same grounds as claim 3.

Claim 23 is rejected on the same grounds as claim 4.

Claim 24 is rejected on the same grounds as claim 5.

Claim 25 is rejected on the same grounds as claim 6.

Claim 26 is rejected on the same grounds as claim 7.

Claim 27 is rejected on the same grounds as claim 9.

Claim 28 is rejected on the same grounds as claim 10.

**Claims 2, 12, 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Khan (US 6,460,038) in view of Notani (US 5,931,900).**

**Claim 2 is rejected as unpatentable over Kahn in view of Notani.**

**As per claim 2,** Khan discloses the use of various protocols, as in Col. 7, line 22-Col. 8, line 67. Kahn **does not** specifically disclose that the directory structure comprises a lightweight directory access protocol (LDAP) directory. Khan suggests that significant reduction in design and development can be achieved by use of various protocols.

Notani discloses the use of a protocol called LDAP. Notani discloses that various levels of name services may be provided via schemes that implement global naming schemes that allow entities to be uniquely defined on a global basis. See, for example, Notani, Col. 14, lines 23-44.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Khan and Notani to disclose that the directory structure may comprise an LDAP directory.

One of ordinary skill in the art at the time the invention was made would have been motivated to combine Khan and Notani to disclose that the directory structure may comprise an LDAP directory for the obvious reason that LDAP provides a single tool to comb through data to find a particular piece of information, as suggested by Kahn, Col. 7, lines 22-Col. 8, line 67.

Claims 12 and 21 are rejected on the same grounds as claim 2.

#### ***Allowable Subject Matter***

Claim 10 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The Examiner also respectfully notes that the claims would be further distinguishable from prior art if "seller databases" if the limitation referred to external database(s) at each seller site, as in related applications and patents and including the concept of LDAP structures.

#### ***Response to Arguments***

Applicant's arguments filed 6 February 2007 have been fully considered but they are not persuasive.

Rejections under 35 USC 112 are withdrawn in view of amendment and remarks.

Prior Art rejections have been raised and answered in previous Office Actions.

#### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to James H. Zurita whose telephone number is 571-272-6766. The examiner can normally be reached on 8a-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey A. Smith can be reached on 571-272-6763. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

**James Zurita**  
**Primary Examiner**  
**Art Unit 3625**  
27 April 2007

*James Zurita*  
*Primary Examiner*